

OCT 19 2004

510(k) Summary  
EC-3870CILK, Confocal Video Colonoscope

K042741 1/1

**Submitter Information:** Pentax Medical Company  
102 Chestnut Ridge Road  
Montvale, New Jersey 07645-1856  
Tel: (201)-391-0932

**Name Of Device:**

Trade Name:	EC-3870CILK, Confocal Video Colonoscope
Classification Name:	Colonoscope, Gastro- Urology (78FDF) {876.1500} [Class II]

**Predicated Device(s) Information:**

Model, Description	Manufacturer	PMN#
EC-3800L, Video Colonoscope	Pentax Corporation	K951574
Zeiss CLSO Confocal Laser Scanner Ophthalmoscope	Carl Zeiss, Inc.	K912581

**Device Description:**

The EC-3870CILK, Confocal Video Colonoscope, must be used with a Pentax Video Processor (software controlled device) and with Pentax Confocal Laser System (software controlled device). The endoscope has a Flexible Insertion Tube, a Control Body, PVE Umbilical Connector, and Confocal Electrical Connector. The PVE Connector connects to the Video Processor and has connections for illumination, video signals, air/water and suction. The Control Body includes controls for up/ down/ left/ right angulation, air/water delivery, suction selection/ control, and an accessory inlet port. The device contains light carrying bundles to illuminate the body cavity, a charge couple device (CCD) to collect image data, forward water jet tube, and a confocal scanner. The instrument contains a working channel through legally marketed endoscopic accessories may be introduced (the instrument is supplied with two biopsy forceps). The Video Processor contains a lamp that provides white light and is focused at the PVE Connector Lightguide Prong. The endoscope light carrying bundles present the light to the body cavity and the CCD collects color image data. Image data and other screen display information are formatted and presented to the video outputs of the Video Processor for display on the endoscopic image monitor. The endoscope confocal scanner contains an optical fiber that transmits laser light to, and receives return light from, the subject tissue. The confocal electrical connector is connected to the confocal laser system. The confocal laser system contains a laser light source which produces visible laser light and contains signal detection circuitry to transmit/ receive the light signals through the endoscope confocal imaging module. The detected signal is sent to the system computer. The System Computer processes the confocal image information for display on the confocal monitor, controls the laser light source, and acts as an image storage device for still frame images. The endoscope is immersable (with the use of supplied cleaning accessories).

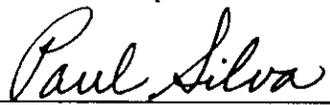
**Intended Use:**

The EC-3870CILK, Confocal Video Colonoscope, is intended to provide optical visualization (via a video monitor), (confocal) microscopic visualization of (via a video monitor), and therapeutic access to, the Lower Gastrointestinal Tract. The Lower Gastrointestinal Tract includes, but is not restricted to, the organs; tissues; and subsystems: Large Bowel. The instrument is introduced per rectally when indications consistent with the requirement for the procedure are observed in adult and pediatric patient populations.

**Comparison To Predicated Device(s):**

The submission for substantial equivalence included EC-3870CILK literature including specifications, the identification of standard set components, and identification of optional accessories, comparison tables were provided to illustrate the comparisons to the predicated devices. The submission for substantial equivalence was not based on an assessment of clinical performance data.

**Prepared By:**

  
Paul Silva, Regulatory Affairs Coordinator

09-09-2004

Date



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

OCT 19 2004

Pentax Medical Company  
c/o Mr. Tamas Borsai  
Division Manager, Medical Division, and  
Program Manager, Third Party Review Program  
TÜV Rheinland of North America  
12 Commerce Road  
Newtown, Connecticut 06470

Re: K042741

Trade/Device Name: EC-3870CILK, Confocal Video Colonoscope  
Regulation Number: 21 CFR 876.1500  
Regulation Name: Endoscope and accessories  
Regulatory Class: II  
Product Code: GCJ, KOG  
Dated: September 30, 2004  
Received: October 4, 2004

Dear Mr. Borsai:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21-CFR 1000-1050.

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

*Miriam C. Provost*  
for Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

510(k) Number (if known): \_\_\_\_\_

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use (Per 21 CFR 801.109)

Miriam C. Provost  
**(Division Sign-Off)**  
**Division of General, Restorative,  
and Neurological Devices**

**510(k) Number** K042741